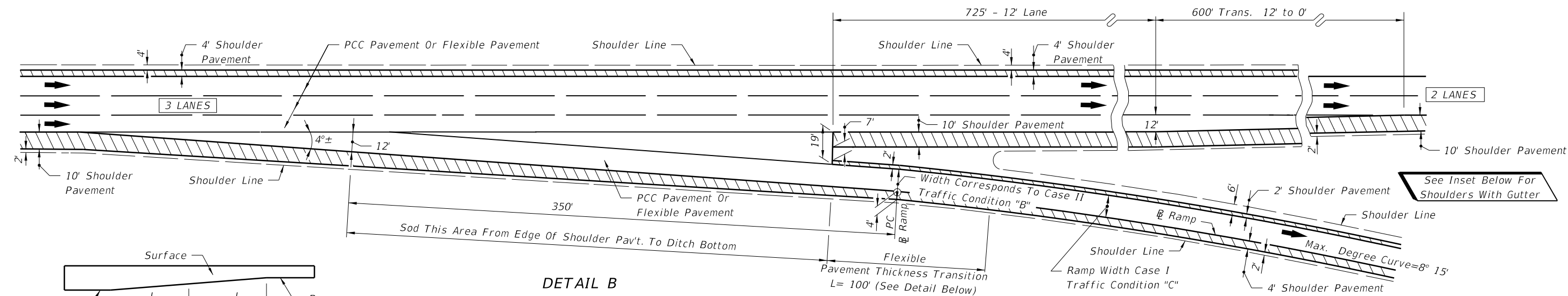
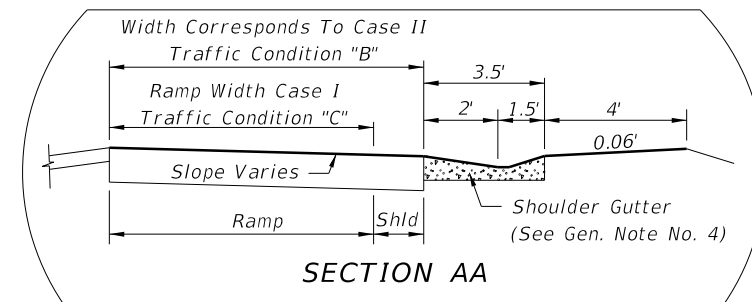
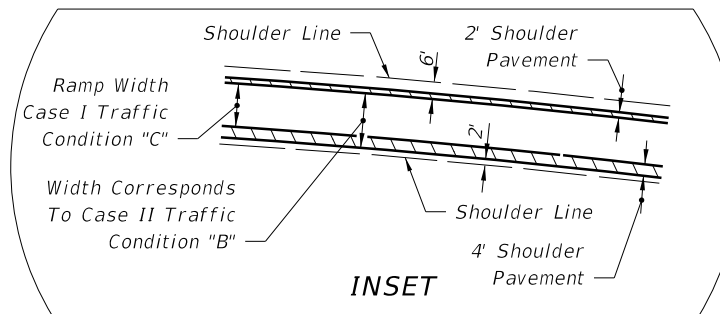
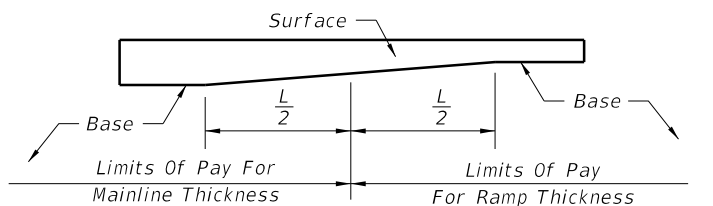


**DETAIL A  
TWO THRU LANES**

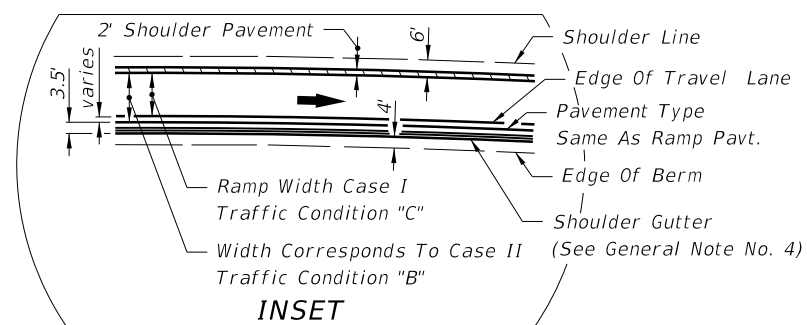


**DETAIL B  
THREE APPROACH LANES - TWO THRU LANES**



**FLEXIBLE PAVEMENT THICKNESS TRANSITION**

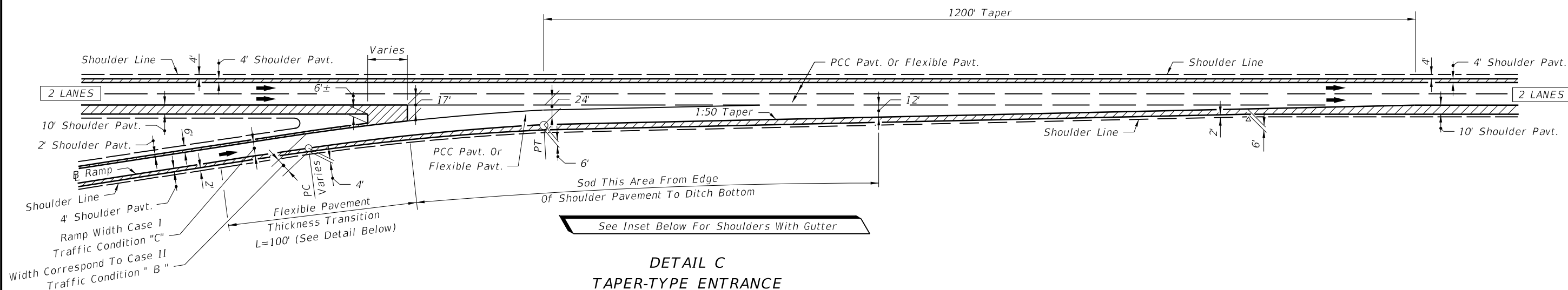
**EXIT TERMINALS  
SINGLE - LANE RAMPS**



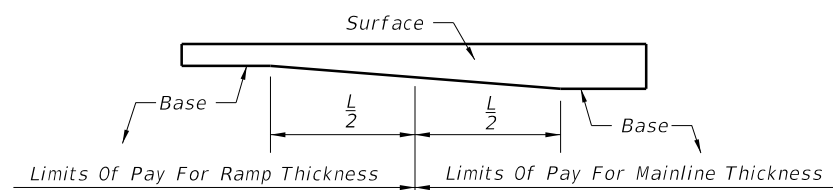
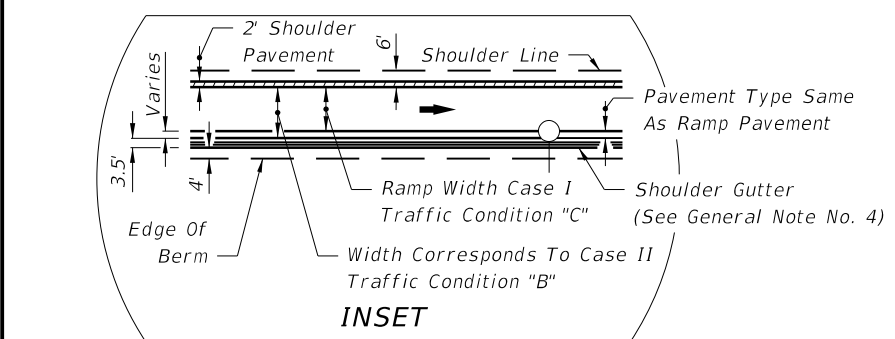
NOTE: For General Notes See Sheet No. 2

5/20/2014 3:21:04 PM

LAST REVISION 07/01/04	REVISION	DESCRIPTION:	 2015 DESIGN STANDARDS	<b>RAMP TERMINALS</b>	INDEX NO. <b>525</b>	SHEET NO. <b>1 of 5</b>
---------------------------	----------	--------------	------------------------------	-----------------------	-------------------------	----------------------------



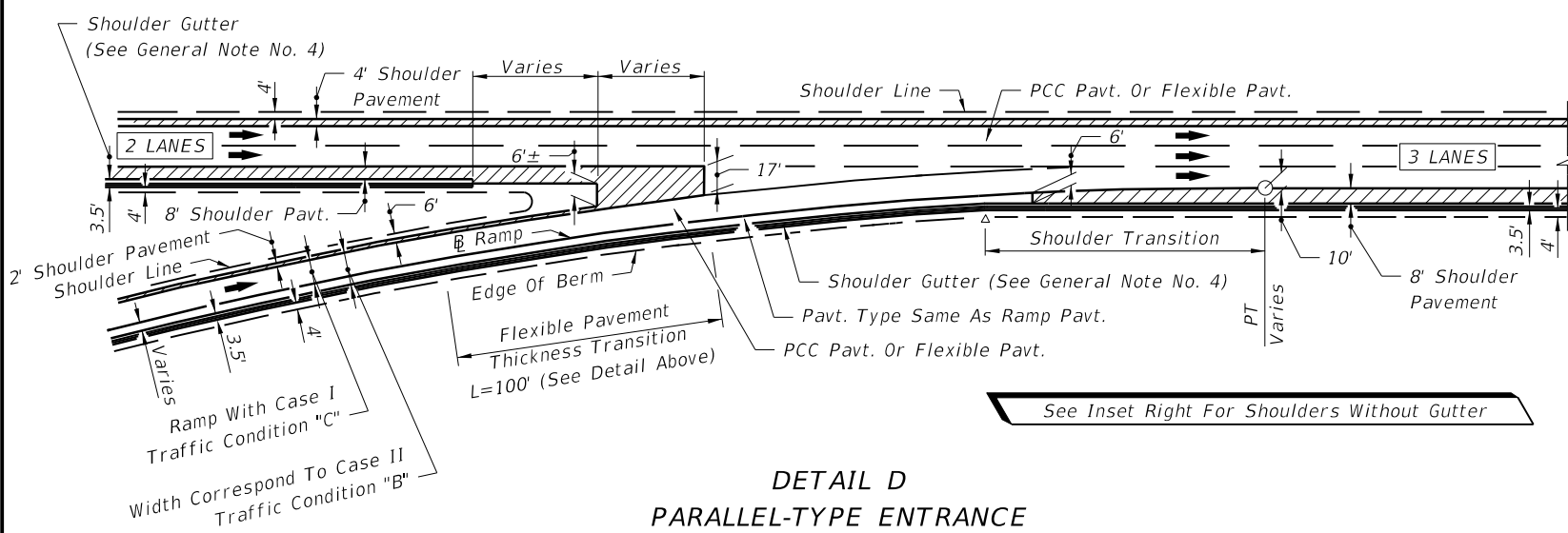
**DETAIL C**  
**TAPER-TYPE ENTRANCE**



**FLEXIBLE PAVT. THICKNESS TRANSITION**

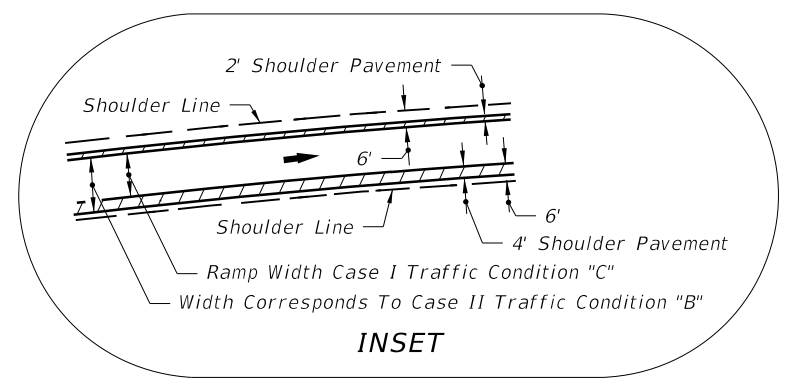
**GENERAL NOTES**

1. Taper-Type exit and entrance terminals as detailed shall not be used on ramps for which a speed of 50 MPH or greater cannot be maintained. For such ramps, parallel deceleration and acceleration lanes shall be used in place of tapers with lengths set according to AASHTO.
2. a. PCC Pavement Projects:  
Where shoulder pavement adjacent to shoulder gutter is less than 6' wide, it shall be identical to the adjacent roadway pavement beginning with the transverse joint nearest the point of 6' width.  
b. Flexible Pavement Projects:  
Where shoulder pavement used in conjunction with shoulder gutter is less than 6' uniform width, it shall be identical to the adjacent roadway pavement.
3. For concrete pavement joint details and layouts at entrance and exit ramp terminals see Index No. 305.
4. Shoulder gutter applications will be determined by drainage design.



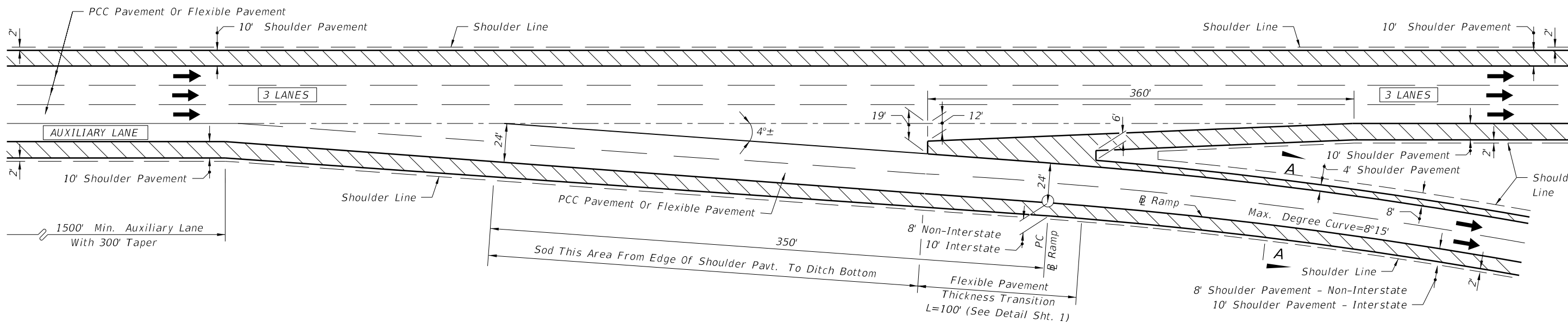
**DETAIL D**  
**PARALLEL-TYPE ENTRANCE**

**ENTRANCE TERMINALS**  
**SINGLE-LANE RAMPS**



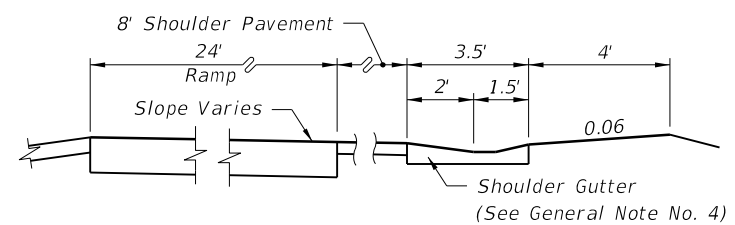
5/20/2014 3:21:04 PM

LAST REVISION 07/01/04	REVISION	DESCRIPTION:	 <b>2015</b> <b>DESIGN STANDARDS</b>	<b>RAMP TERMINALS</b>	INDEX NO. <b>525</b>	SHEET NO. <b>2 of 5</b>
---------------------------	----------	--------------	--	-----------------------	-------------------------	----------------------------




THREE THRU LANES - APPROACH AUXILIARY LANE

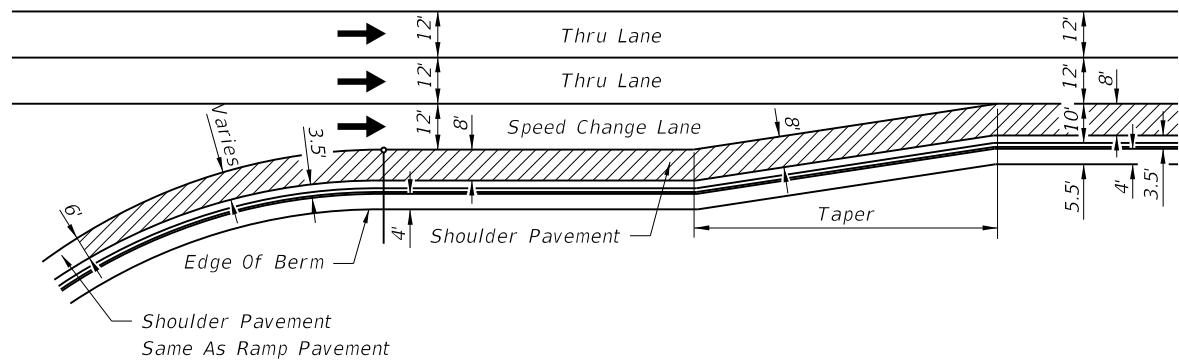
EXIT TERMINALS  
TWO-LANE RAMPS



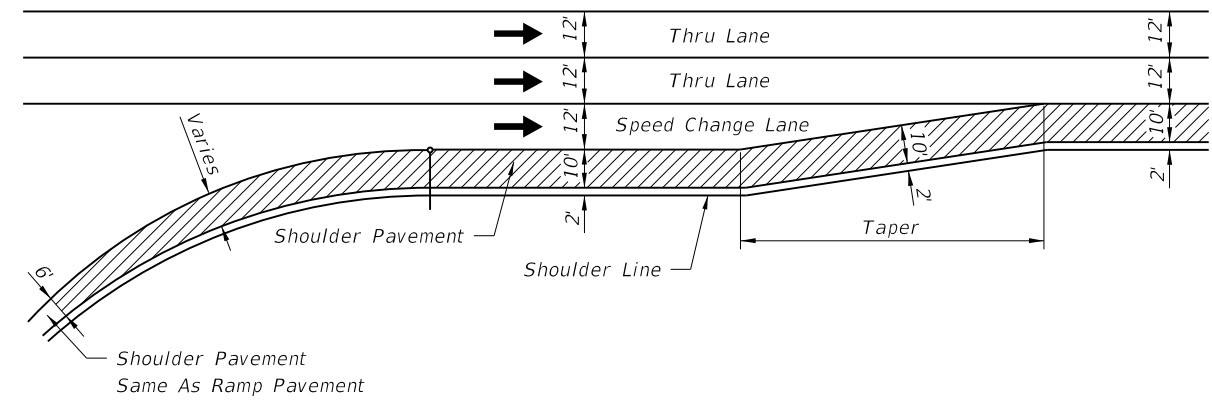
SECTION WHEN SHOULDER GUTTER USED  
SECTION AA

5/20/2014 3:21:05 PM

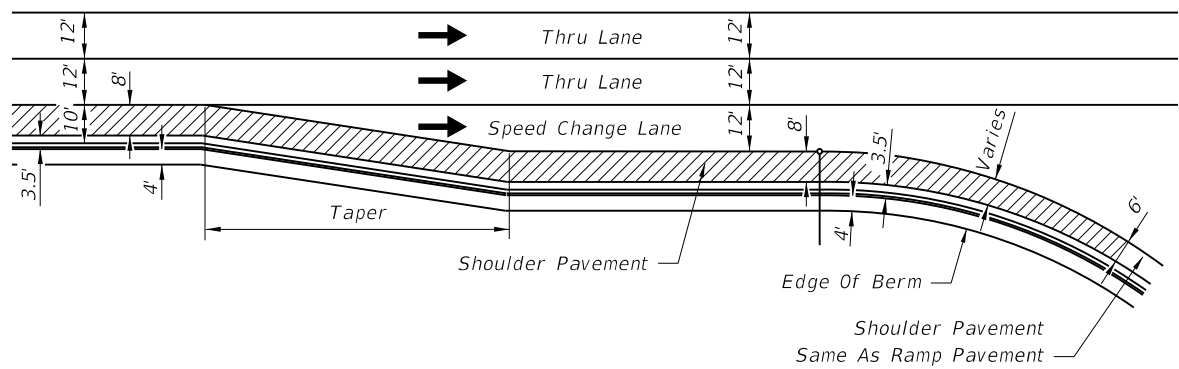
LAST REVISION 07/01/00	REVISION	DESCRIPTION:	 <b>2015</b> DESIGN STANDARDS	RAMP TERMINALS	INDEX NO. 525	SHEET NO. 3 of 5
---------------------------	----------	--------------	---	----------------	------------------	---------------------



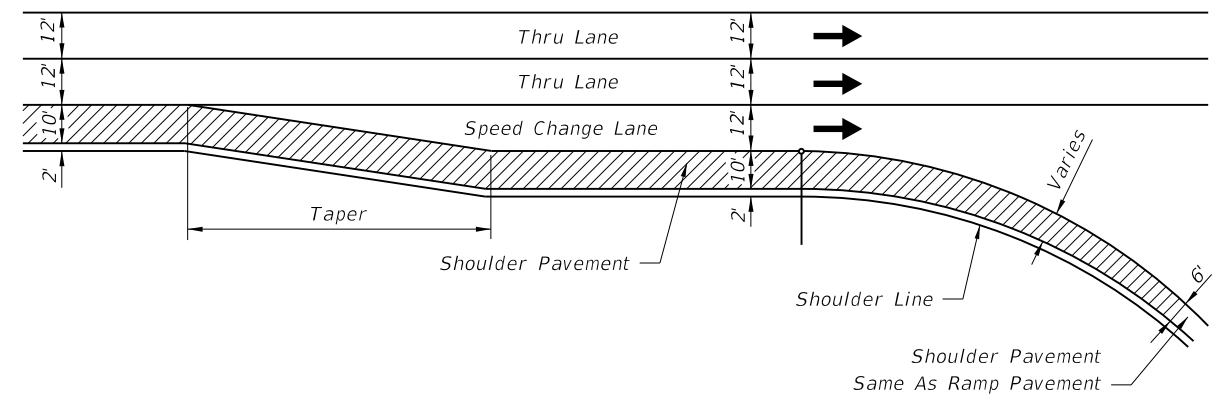
ACCELERATION LANE WITH SHOULDER GUTTER



ACCELERATION LANE WITHOUT SHOULDER GUTTER



DECELERATION LANE WITH SHOULDER GUTTER



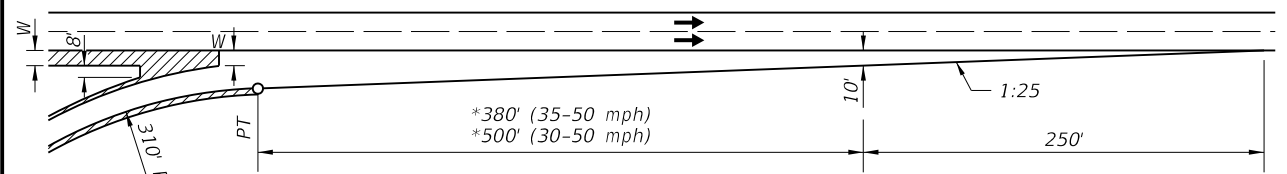
DECELERATION LANE WITHOUT SHOULDER GUTTER

SHOULDER TREATMENT  
AT SPEED CHANGE LANES AT FREEWAY RAMP TERMINALS

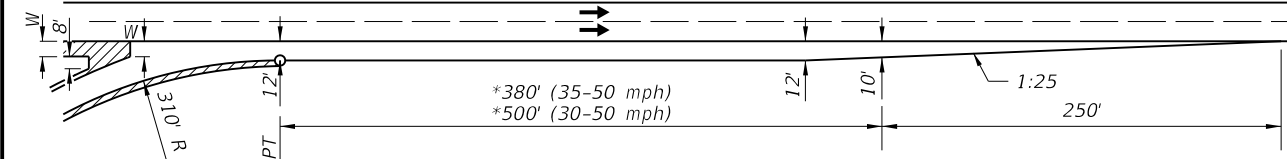
FREEWAY RAMP TERMINALS

5/20/2014 3:21:05 PM

LAST REVISION 07/01/05	REVISION	DESCRIPTION:	 2015 DESIGN STANDARDS	RAMP TERMINALS	INDEX NO. 525	SHEET NO. 4 of 5
---------------------------	----------	--------------	--	----------------	------------------	---------------------

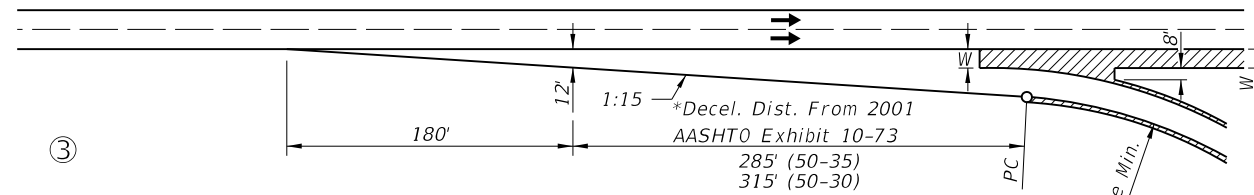


① Standard cross road entrance terminals. To be used when roadway alignment is tangent and no bridges are located within the merging lane.

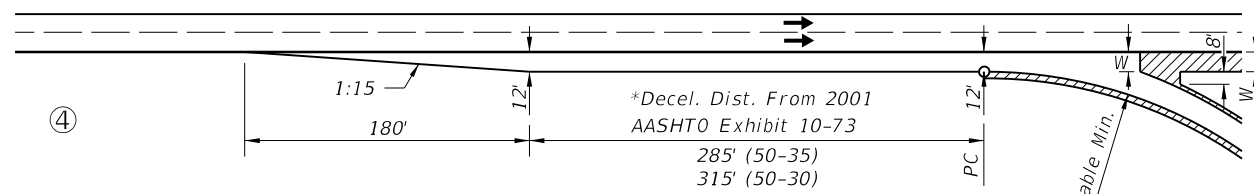


② Parallel cross road entrance terminals. Recommended when a bridge is located within the merging lane, turning roadway speed is less than 60% of thru roadway speed or for the combinations of horizontal alignment shown elsewhere on this sheet.

**UNSIGNALIZED ENTRANCES**



③ Standard cross road exit terminal. To be used when roadway alignment is tangent.



④ Parallel cross road exit terminals. Recommended when exit is partially hidden over the crest of vertical curve or when turning roadway speed is less than 60% of the thru roadway speed, or for the combinations of horizontal alignment shown elsewhere on this sheet.

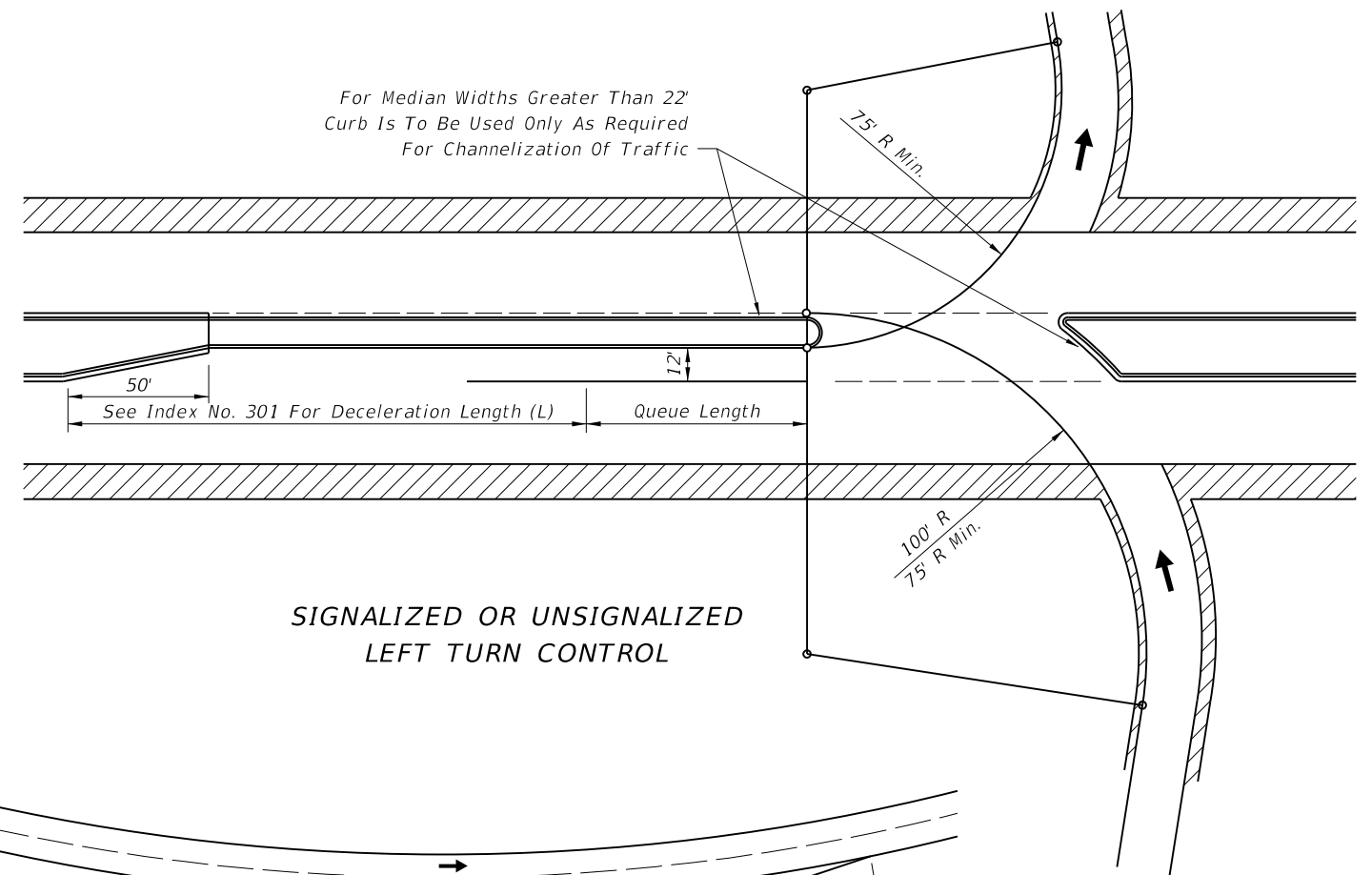
**UNSIGNALIZED EXITS**

**FOOTNOTES:**

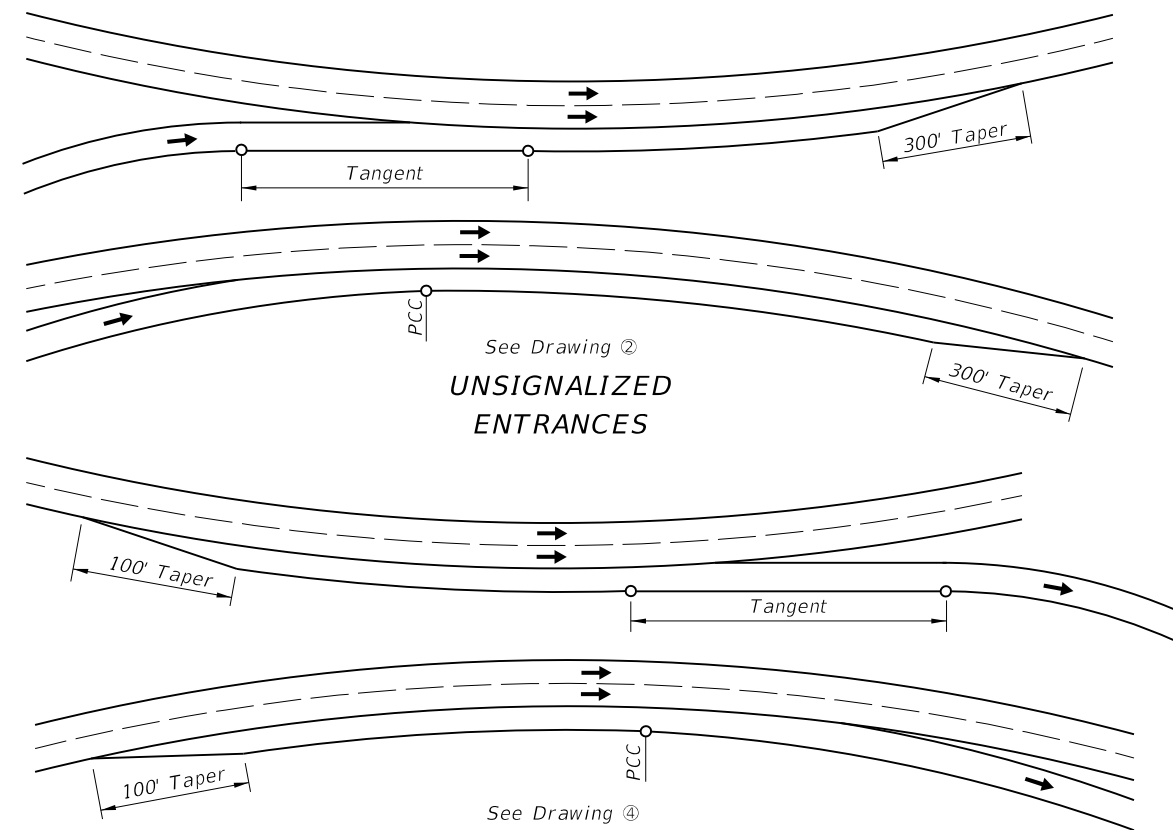
W Normal shoulder pavement width.

\* Adjust for grades if greater than 2% (See Exhibit 10-71, AASHTO).

**RAMP TERMINALS**



**SIGNALIZED OR UNSIGNALIZED LEFT TURN CONTROL**



NOTE: Ramp terminals on curves should be avoided when possible.

**RAMP TERMINALS ON CURVES**

**CROSSROAD TERMINALS**

**RAMP TERMINALS**

5/20/2014 3:21:05 PM

LAST REVISION 07/01/13	REVISION	DESCRIPTION:	<p>2015 DESIGN STANDARDS</p>	<p>RAMP TERMINALS</p>	INDEX NO. 525	SHEET NO. 5 of 5